

CITY COUNCIL AGENDA MEMORANDUM

SUBJECT

Resolution No. 8708 authorizing execution of a professional services agreement with MWH Americas, Inc. for on-call construction management and inspection services for various Utilities CIP programs, in an amount not to exceed \$300,000 (CIP Plan Nos. D-64, S-24 and W-16).

FISCAL IMPACT

This contract obligates the City to an amount up to \$300,000. This work is included in the 2013-2019 CIP. This contract is fully funded through the Utility's CIP Program as follows:

| CIP Plan No. | CIP Program Name | Amount |
|---------------------|---|------------------|
| D-64 | Storm Water System Conveyance Infrastructure Rehabilitation | \$100,000 |
| S-24 | Sewer System Pipeline Rehabilitation | 100,000 |
| W-16 | Small Diameter Water Main Replacement | 100,000 |
| | Total Contract Amount | \$300,000 |

STAFF CONTACT

Nav Ota, Director, 452-2041

Paul Bucich, Engineering Assistant Director, 452-4596

Utilities Department

POLICY CONSIDERATION

Utilities Department policies:

- The Utility shall identify drainage capital projects that prevent or reduce flooding or property damage, protect or improve water quality, and maintain or improve the reliability and integrity of the drainage system.
- The Utility shall invest resources as necessary to construct, maintain and renew water and sewer system infrastructure and equipment such that Utility customers are provided consistent, reliable service.
- To invest resources as necessary to construct, maintain and renew water system infrastructure and equipment so that Utility customers are provided with consistent, reliable service.

Utilities Department practice:

- Rehabilitate or replace deteriorated elements of the storm drainage system to ensure that utility customers are provided with consistent and reliable service. CIP Plan No. D-64 has been designated to do this.
- Rehabilitate or replace deteriorated elements of the wastewater system. CIP Plan No. S-24 has been designated to do this.
- Replace small diameter asbestos cement water main installed in the late 1940's and 1950's to reduce the possibility of water main breaks. CIP Plan No. W-16 has been designated to do this.

City Contracting policies:

- BCC 4.28 provides for the fair and equitable treatment in the purchasing process. Because the amount of the contract exceeds \$50,000, Council approval is required.

BACKGROUND

Utilities has an ongoing CIP project to address the rehabilitation or modification of the various elements of the aging storm water, water and sewer systems, as well as drinking water quality modifications, structural rehabilitation of reservoirs and a new sanitary sewer pipeline replacement program. The current anticipated workload is likely to exceed available resources to perform those upcoming inspection needs, especially during the summer construction season. The use of consultants is one of the tools Utilities uses to manage this fluctuating workload.

Approval of this agreement will allow Utilities to maintain high customer service levels while ensuring that capital projects receive sufficient inspections so that the quality of work is maintained and contract compliance is achieved. This is an on-call contract that allows the Department to utilize outside service as needed, depending on workload and project scheduling. The contract duration goes through March 2018.

MWH Americas, Inc. may provide inspection and construction management services for a variety of projects for which they will perform daily inspection services. Tasks include on-site inspection of work in progress, documenting the progress with inspection reports and photographs, monitoring traffic control and site safety, and responding to and addressing questions and concerns of adjacent property owners and the general public.

A notice went out to all Professional Services/A&E Consultants on the Citywide Roster for Utilities Water, Sewer, Storm and Surface Water on November 26, 2012. Consultants were asked to update their Statement of Qualifications (SOQ's) by December 27, 2012 if they wanted to be considered for Inspection Services.

Updated SOQ's were evaluated based on project inspection experience and resources related to underground utilities for water, sewer and surface water. Consistent with the City's policies and procedures, five consulting firms were sent a Request for Proposal (RFP). The RFP's were to be used for a 4 year hiring period 2013 through 2017. All five firms submitted RFP's and are as follows:

- CHS Engineers, LLC
- MWH Americas, Inc.
- Jacobs Engineering Group, Inc.
- Pace Engineering, Inc.
- RH2 Engineering, Inc.

MWH Americas, Inc. was selected for 2014 – 2018 based on the firm's qualifications which included:

- Depth of construction inspection knowledge and experience,
- Inspection staff experience in all three disciplines of water, sewer and surface water,
- Experience in more complex projects, i.e. pump stations, lift stations and reservoirs,
- Community information and involvement process,
- Familiarity with required permitting processes,
- Availability backed by a large diverse staff of inspectors
- Strength of references.

As required by state law relating to contracts for architectural and engineering services, the City selects the consultant deemed to be the most highly qualified for a given project. State law precludes using cost as a basis for selection of engineering firms.

EFFECTIVE DATE

If adopted, this Resolution will become effective immediately.

OPTIONS

1. Adopt Resolution No. 8708, authorizing execution of a professional services agreement with MWH Americas, Inc. for on-call construction management and inspection services for various Utilities CIP programs, in an amount not to exceed \$300,000 (CIP Plan Nos. D-64, S-24 and W-16).
2. Do not adopt the Resolution and provide alternative direction to staff.

RECOMMENDATION

Adopt Resolution No. 8708, authorizing execution of a professional services agreement with MWH Americas, Inc. for on-call construction management and inspection services for various Utilities CIP programs, in an amount not to exceed \$300,000 (CIP Plan Nos. D-64, S-24 and W-16).

MOTION

Move to adopt Resolution No. 8708, authorizing execution of a professional services agreement with MWH Americas, Inc. for on-call construction management and inspection services for various Utilities CIP programs, in an amount not to exceed \$300,000 (CIP Plan Nos. D-64, S-24 and W-16).

ATTACHMENTS

CIP Project Descriptions

Proposed Resolution No. 8708

AVAILABLE IN COUNCIL OFFICE

Consultant Contract

D-64 Storm Water System Conveyance Infrastructure Rehabilitation

Category: **Storm Drainage**
 Department: **Utilities**

Status: **Ongoing**
 Location: **Various locations throughout the City**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 16,160,063 | 9,426,957 | 884,338 | 909,936 | 935,334 | 960,533 | 987,389 | 1,014,099 | 1,041,477 |

Description and Scope

This ongoing program rehabilitates or replaces defective storm drainage pipelines and ditches identified in the Utility's condition assessment program or other means. Projects are prioritized based on the severity of deterioration, the risk and consequence of failure, and coordination with planned street improvement projects. As the system ages, costs are expected to increase. The Utilities' Asset Management Program is evaluating when system replacement will require significant increases to the budget.

PROJECT NEED: System Renewal and Replacement

Rationale

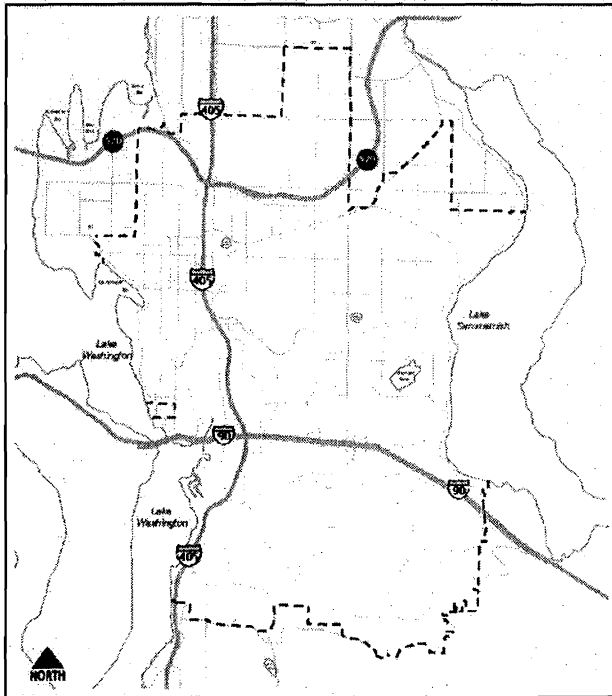
Much of the storm pipe network was built before pipe material and construction standards were in place, so there is only limited information about when pipes were installed, their size and composition. Bellevue owns almost 400 miles of stormwater conveyance pipe, with limited information available to predict how long it will last. Of particular concern is corrugated metal pipe, which can completely corrode away in as little as 20 years, or if properly maintained last longer than 50 years. Pipe collapse or blockage can result in washed-out roads, flooded homes, environmental damage, and traffic disruption. This program provides for repair or replacement of defective stormwater conveyance pipes, culverts and ditches, to prevent such consequences. It proactively repairs pipes under arterials in advance of street resurfacing, saving costs and minimizing disruption. It also focuses on critical pipes where the consequences of failure would be significant.

Environmental Impacts

The environmental impacts will be determined for each specific project.

Operating Budget Impacts

This project will have no impact on operating revenues (and/or) expenditures, since it replaces or repairs existing facilities.

Project Map**Schedule of Activities**

| Project Activities | From - To | Amount |
|--------------------|-------------|------------|
| Project Costs | 1995 - 2019 | 16,160,063 |

Total Budgetary Cost Estimate: 16,160,063

Means of Financing

| Funding Source | Amount |
|------------------------|------------|
| Judgements/Settlements | 33,000 |
| Miscellaneous Revenue | 680,000 |
| Utility Rates/Fees | 15,447,063 |

Total Programmed Funding: 16,160,063

Future Funding Requirements: 0

Comments

This project will be located throughout the city.

FY2013-2019 Capital Investment Program

S-24 Sewer System Pipeline Rehabilitation

Category: **Sewer**
Department: **Utilities**

Status: **Ongoing**
Location: **Various locations throughout Sewer Utility's service area**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|--------------------|----------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| 26,830,213 | 14,495,072 | 1,175,521 | 1,736,192 | 1,784,652 | 1,832,733 | 1,883,975 | 1,934,915 | 1,987,153 |

Description and Scope

This program funds repair of localized defects and occasional relining of defective sewer pipes. Most defects are identified from the Utility's infrastructure condition assessment (video) program. Pipes are selected for repair based on risk of failure (likelihood and consequence), failure history, and to coordinate with other construction, such as planned street overlays (which reduce restoration costs).

PROJECT NEED: System Renewal and Replacement

Rationale

Bellevue's 650+ miles of sewer mains and 'stubs' that carry wastewater from homes and businesses to the mains are rapidly deteriorating. Most are 35-60 years old, and more than halfway through their expected functional life. As pipes age, cracks become wider and joints between pipes loosen, increasing the likelihood of blockages that cause sewer backups. Pipe rehabilitation reduces pipeline failures, reduces the risk of blockages or collapse that could result in property damage, and reduces the amount of ground water entering the sewer system which in turn reduces the risk of exceeding the system capacity.

In many cases, localized 'spot' repairs are the most cost effective choice and assure maximum total pipe life. Video observations and condition data indicates whether full pipe replacement or relining is more cost effective.

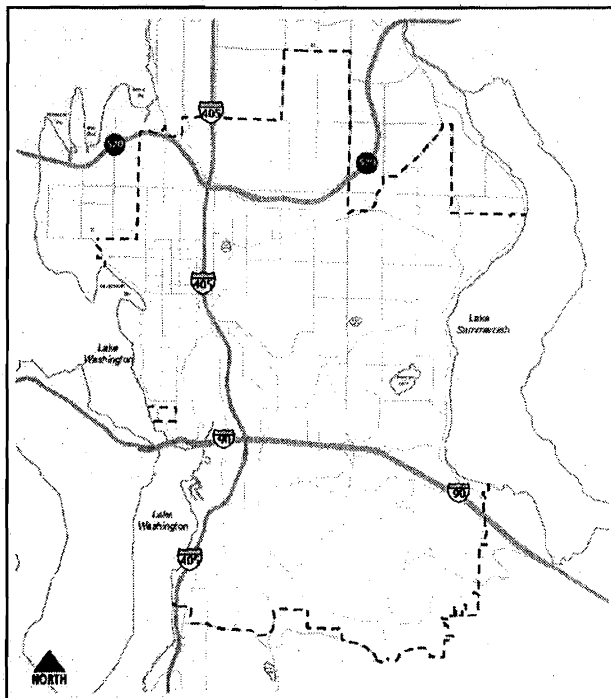
Environmental Impacts

The environmental impacts and the State Environmental Protection Act (SEPA) requirements will be determined for each replacement segment, but they are generally SEPA exempt.

Operating Budget Impacts

This project will have no impact on operating revenues (and/or) expenditures, since it replaces or repairs existing facilities.

Project Map



Schedule of Activities

| Project Activities | From - To | Amount |
|--------------------|-------------|------------|
| Project Costs | 1990 - 2019 | 26,830,213 |

Total Budgetary Cost Estimate: 26,830,213

Means of Financing

| Funding Source | Amount |
|------------------------|------------|
| Judgements/Settlements | 84,000 |
| Miscellaneous Revenue | 879,000 |
| Utility Rates/Fees | 25,867,213 |

Total Programmed Funding: 26,830,213

Future Funding Requirements: 0

Comments

This project will be located throughout the service area.

W-16 Small Diameter Water Main Replacement

Category: **Water**
 Department: **Utilities**

Status: **Ongoing**
 Location: **Various locations throughout Water Utility's service area**

Programmed Funding

| Programmed Funding | Appropriated To Date | FY 2013 Budget | FY 2014 Budget | FY 2015 Budget | FY 2016 Budget | FY 2017 Budget | FY 2018 Budget | FY 2019 Budget |
|---------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 89,443,058 | 36,739,552 | 5,359,024 | 6,059,309 | 6,788,816 | 7,547,194 | 8,349,776 | 9,175,831 | 9,423,556 |

Description and Scope

This program focuses primarily on replacing short-lived small diameter asbestos cement (AC) pipe, which yields a secondary benefit of increasing the emergency fireflow available to neighborhoods. This investment will ramp up water pipeline replacement to 5 miles/year by 2018, and then be adjusted with inflation to maintain the 5 miles/yr replacement rate. At that rate, water pipe will need to last on average 100-125 years. Pipes are selected for replacement based on risk of failure (likelihood and consequence), failure history, and coordination with other construction, such as planned street overlays (which reduce restoration costs).

PROJECT NEED: System Renewal and Replacement

Rationale

Water pipeline replacement will ramp up from 1.5 miles per year to 5 miles per year over a year-year period. Acceleration of this project is required to achieve the Asset Management Program (AMP) goal of cost effective system renewal and replacement while maintaining acceptable customer service levels. Experience has shown that small diameter AC pipes have the shortest life. AC pipe fails catastrophically, often causing significant damage to nearby properties and triggering more breaks in nearby AC pipes.

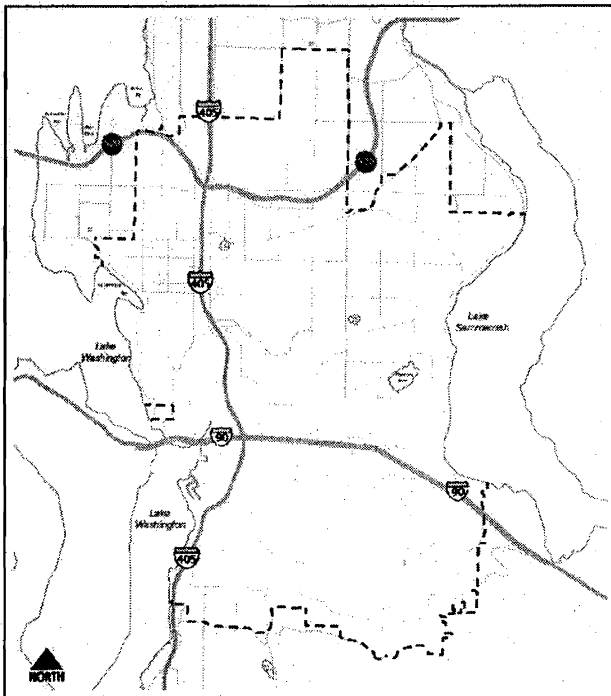
Small diameter AC pipe accounts for a disproportionate share of water main breaks. Besides size and material, soil corrosiveness, moisture content, and original construction quality affect pipe life. As budgeted, most 4-inch AC pipe will be replaced by 2017, reaching a maximum pipe age of 61 years. Replacement of 6-inch AC main would follow, over a 30 year period. Larger diameter mains would be replaced before they reach 125 years old. Pipes of other materials (ductile and cast iron, clay) will also be replaced as needed. The potential for main breaks will be significantly reduced, minimizing service disruptions to customers and costly emergency repairs, and reducing claims exposure.

Environmental Impacts

Replacement of Water mains less than eight inches in diameter are generally exempt from environmental review, unless they are in or adjacent to sensitive areas. The status of environmental review of specific projects is undetermined.

Operating Budget Impacts

This project will have no impact on operating revenues (and/or) expenditures, since it replaces existing facilities.

Project Map**Schedule of Activities**

| Project Activities | From - To | Amount |
|---------------------------|------------------|---------------|
| Project Costs | Ongoing | 89,443,058 |

Total Budgetary Cost Estimate: 89,443,058

Means of Financing

| Funding Source | Amount |
|------------------------|---------------|
| Judgements/Settlements | 42,000 |
| Miscellaneous Revenue | 946,000 |
| Utility Rates/Fees | 88,455,058 |

Total Programmed Funding: 89,443,058

Future Funding Requirements: 0

Comments

This project is located throughout the service area.

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 8708

A RESOLUTION authorizing the execution of a professional services agreement with MWH Americas, Inc., in an amount not to exceed \$300,000 (CIP Plan Nos. D-64, S-24, and W-16) for on-call construction management and inspection services for various Utilities CIP programs.

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES
RESOLVE AS FOLLOWS:

Section 1. The City Manager or his designee is hereby authorized to execute a professional services agreement with MWH Americas, Inc., in an amount not to exceed \$300,000 (CIP Plan Nos. D-64, S-24, and W-16) for on-call construction management and inspection services for various Utilities CIP programs, a copy of which agreement has been given Clerk's Receiving No. _____.

Passed by the City Council this _____ day of _____, 2014,
and signed in authentication of its passage this _____ day of _____,
2014.

(SEAL)

Claudia Balducci, Mayor

Attest:

Myrna L. Basich, City Clerk